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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,087	04/19/2004	Kuang-Kai Liu	9607	1863

27752 7590 04/17/2007

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EXAMINER	
BOGART, MICHAEL G	
ART UNIT	**PAPER NUMBER**
3761	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/827,087	LIU, KUANG-KAI	
	Examiner	Art Unit	
	Michael G. Bogart	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 8-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 8-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 8 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cammarota *et al.* (US 6,307,119 B1)(hereinafter: "Cammarota") in view of Muckenfuhs *et al.* (US 4,934,535; hereinafter "Muckenfuhs").

Regarding claims 1 and 13, Cammarota teaches a disposable absorbent article (20) and method of making the same comprising:

a) a liquid pervious topsheet (42);

b) a liquid impervious backsheet (40) that is at least partially joined to the topsheet (42);

c) an absorbent core (44) disposed at least partially between the topsheet (42) and the backsheet (40); and

d) a wetness indicator (60, 66) at least partially disposed between the absorbent core (44) and the backsheet (40) and in liquid communication with the absorbent core (44)(e.g., printed on backsheet interior surface); the wetness indicator comprising a hidden central graphic (60, 81, 96, 97) and a background graphic (66, 85);

wherein the central graphic (60, 81, 96, 97) comprises a permanent color composition and the background graphic (66, 85) comprises at least one responsive color composition and that,

upon wetting, exhibits a visible change that is selected from the group consisting of a color change, a graphic change, and combinations thereof (col. 16, line 28-col. 18, line 8)(see fig. 5, infra).

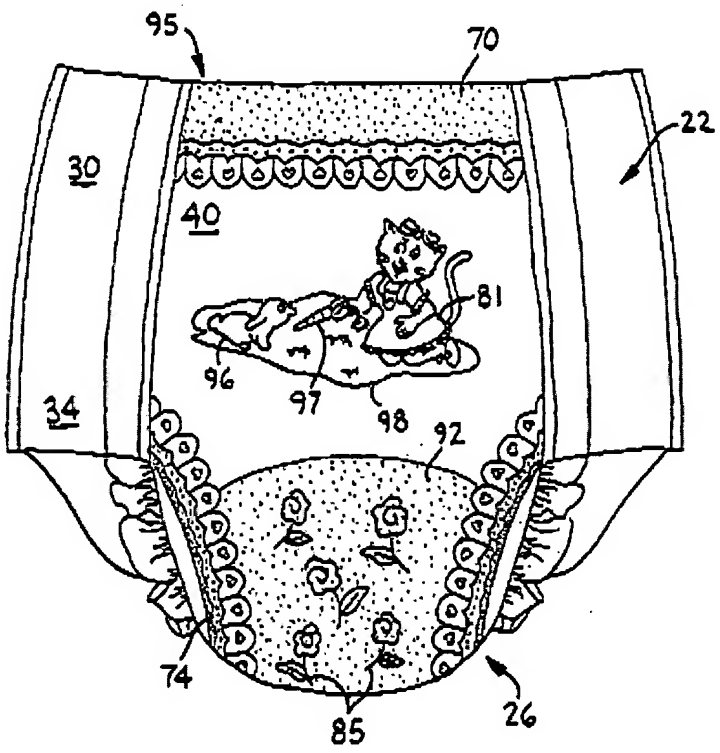

FIG. 5

Regarding the appearing when wetted aspects of the hidden graphic, this is a functional limitation. Apparatus claims must be structurally distinguishable from the prior art. MPEP § 2114.

Cammarota does not teach that the central graphic is hidden.

Muckenfuhs teaches diapers (20) arranged in a package (15) such that they are hidden from view (see fig. 1, infra). This arrangement provides for convenient storage and transport of multiple diapers.

At the time of the invention, it would have been obvious for one of ordinary skill in the art to store the diaper of Cammarota in the package of Muckenfuhs in order to provide a convenient means of storage and transport.

Regarding claim 8, Cammarota teaches plurality of active graphics (66, 109)(see fig. 7, infra).

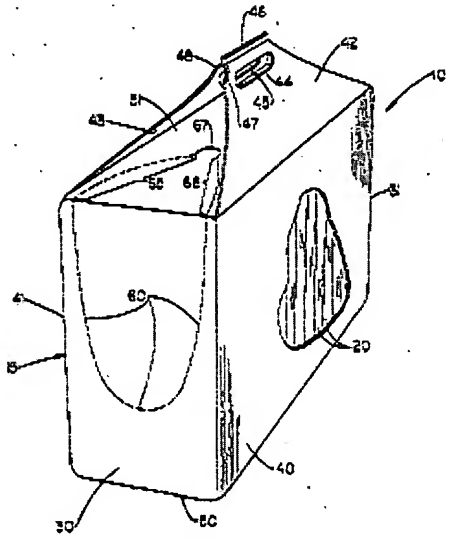

Fig. 1

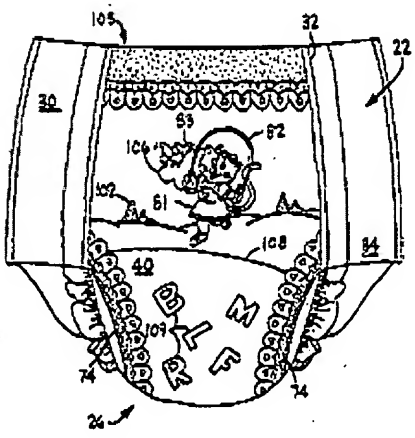

FIG. 7

Claims 2-5 and 9-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cammarota and Muckenfuhs as applied to claims 1, 8 and 13, above, and further in view of Baker *et al.* (US 3,675,654; hereinafter "Baker"), Ball US 4,909,879) and Ito *et al.* (US 5,595,754 A; hereinafter "Ito").

Regarding claims 2-5, 9, 11 and 12, Cammarota in view of Muckenfuhs does not teach the specific types/forms of pigments, dyestuffs solvents or a varnish coating.

These components are commonly issued in a wide variety of combinations in textile graphics production and in changeable graphics/indicators in absorbent articles. For example:

Baker teaches a varnish coating used to coat a moisture-actuated indicating agent (col. 1, lines 40-47) and solid pigment particles (col. 7, lines 31-44).

Ito teaches a non-aqueous solvent (claim 1).

Ball teaches the use of soluble dyestuff (abstract).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to add the component materials of the secondary references to make the graphics of Cammarota and Muckenfuhs in order to provide very well known components of graphics/indicator/dye formation.

Regarding the specific ranges of materials, generally, differences in ranges will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). MPEP § 2144.05.

One of ordinary skill in the art would have recognized the benefits of increasing or decreasing the amount of pigment, dyestuff, or solvent and would have been motivated to find the optimal weight % of each component.

Regarding claim 10, Cammarota teaches a plurality of active graphics (66, 109)(see fig. 7, supra).

Response to Arguments

Applicant's arguments filed 01 February 2007 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a wetness indicator, that comprises both a permanent color composition and a responsive color composition that upon wetting exhibits a visible change to reveal the previously hidden central graphic) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

What is actually claimed is a wetness indicator with a central hidden graphic and a background graphic "wherein the central graphic comprises a permanent color composition and

the background graphic comprises at least one responsive color composition and that, upon wetting, exhibits a visible change that is selected from the group consisting of a color change, a graphic change, and combinations thereof and wherein the central graphic is revealed". This does not require that the central graphic is revealed only in response to the visible change to the background graphic. Nor does it require a specific sequence where the background must undergo a visible change prior to the central graphic is revealed.

Cammarota in view of Muckenfuhs can be reasonably interpreted as teaching both central permanent graphics and background wetness responsive graphics on an absorbent article, all of which is hidden from view while the absorbent article is packaged. Both types of graphics can be reasonably part of the wetness indicator system, even if the central graphic is not liquid sensitive. At least the central graphic is revealed when the absorbent article is removed from the package as taught by Muckenfuhs. Later, in use, the background graphics can exhibit a change in response to water and/or urine.

In response to applicant's argument that Muckenfuhs does not teach a wetness indicator with both a permanent color composition and a responsive color composition, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Regarding applicant's assertion that there is not motivation to combine the teaching of Muckenfuhs and Cammarota, Muckenfuhs teaches that the purpose of that invention was to

provide a means of packaging a large number of diapers compactly. The packaging system of Muckenfuhs would be suitable for many types of diapers, whether they have graphics, a wetness indicator, etc.

Regarding the rejections of claims 2-5 and 9-12, applicants correctly point out that the reference to Olson was in error, and was meant to refer to Cammarota and Muckenfuhs.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bogart whose telephone number is (571) 272-4933.

In the event the examiner is not available, the Examiner's supervisor, Tatyana Zalukaeva may be reached at phone number (571) 272-1115. The fax phone number for the organization

where this application or proceeding is assigned is (571) 273-8300 for formal communications. For informal communications, the direct fax to the Examiner is (571) 273-4933.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Bogart
14 April 2007

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